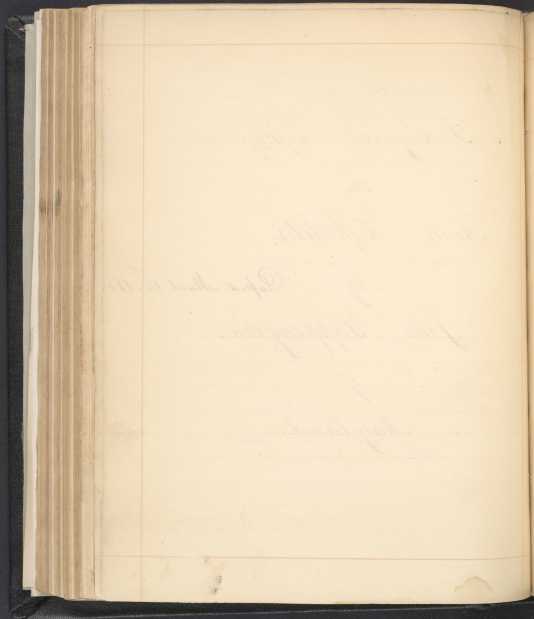


An  
Inaugural Essay.  
on  
Acute Hepatitis.

by      Printed March 14<sup>th</sup>. 1825.  
John Lappington.  
of  
Maryland.



An  
Inaugural Dissertation.

For  
The Degree  
of  
Doctor of Medicine.  
Submitted to  
The Examination.  
of The

Medical Professors.

of The  
University of Pennsylvania.

On the day of Novr 1824

the 1st of January

to the 31st of December

of the year 1880

the 1st of January

to the 31st of December

of the year 1881



## Hepatitis.



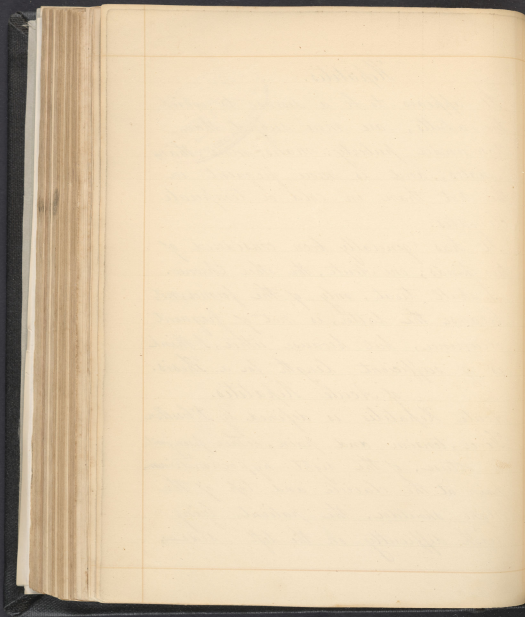
It appears to be a disease to which the adults, are more subject than those under puberty; males, more than females, and is more frequent in the hot than in cold or temperate climates.

It has generally been considered of two kinds; one Acute, the other Chronic.

I shall treat, only of the former; not because the latter, is not of frequent occurrence, but because <sup>it</sup> is, I think is of sufficient length for a Thesis.

### of Acute Hepatitis.

Acute Hepatitis is defined by Dr Cullen Fever, tension and pain, either pungent or obtuse, of the right hypochondrium, pain at the clavicle and top of the right shoulder, the patient lying with difficulty on the left side;

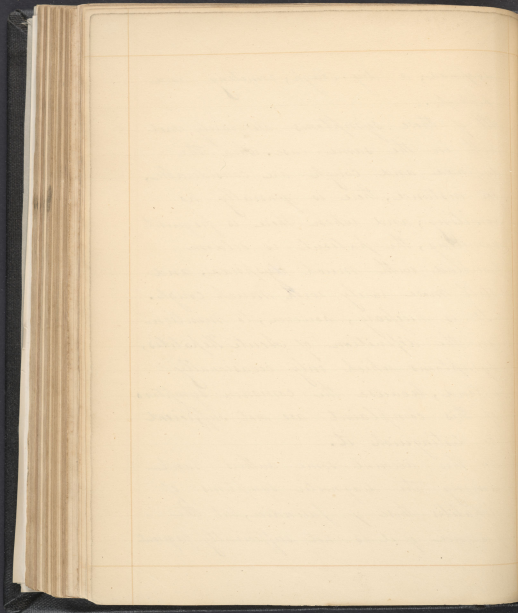


dyspnoea; a dry cough; vomiting and hiccup.

All of these symptoms are rarely met with in the same case, when the dyspnoea and cough are considerable, for instance, there is generally no vomiting; and when there is frequent vomiting, the patient is seldom troubled with much dyspnoea, and still more rarely with much cough.

It is necessary, however, to mention in the definition of Acute Hepatitis, symptoms which only occasionally attend, because the common symptoms of this complaint are not sufficient to distinguish it.

On this account some authors rank among the diagnostic symptoms of Hepatitis those of jaundice, but the presence of it is not sufficiently frequent



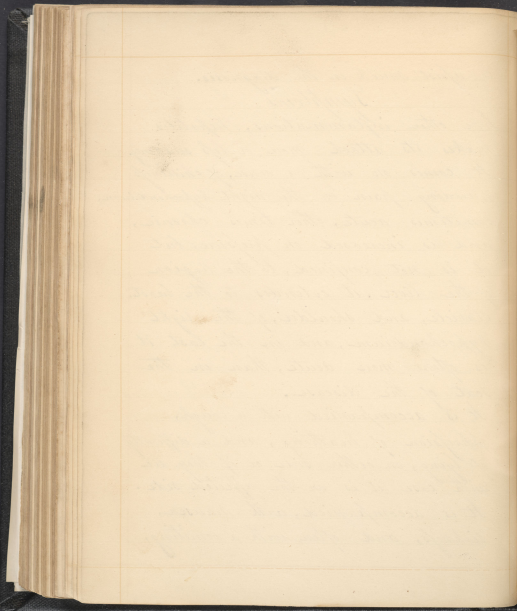
to assist much in the diagnosis.

### Symptoms

Like other inflammations, Hepatitis makes its attack more or less suddenly. It comes on with a sense, of chilliness preceding pain in the right hypochondrium, sometimes acute, other times chronic, and is increased on pressure, but it is not confined, to the region of the liver, it extends to the breast, clavicle, and shoulder, of the right hypochondrium, and in the last it is often more acute, than in the seat of the disease.

It is accompanied with a cough, oppression of breathing, and a difficulty of lying, on either side or if they lie with ease it is on the affected side.

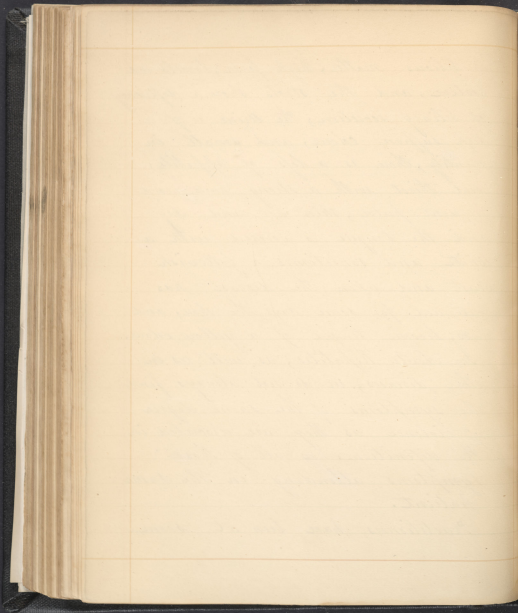
It is accompanied, with nausea, sickness, and often with a vomiting,



of bilious matter; high fever; bowels are costive, and the stools show a deficiency of biliary secretion; the urine is of a deep saffron colour, and small in quantity; there is a loss of appetite; great thirst with a strong hard and frequent pulse; skin hot and dry and the tongue is covered with a white and sometimes a yellowish crust and when the disease has continued for some days the skin, and eyes, become tinged of a yellow colour.

In Acute Hepatitis, as well as in other diseases, we do not always find the symptoms of the same degree of violence as they are described in the definition: nor all of those symptoms attending in the same patient.

Practitioners have been at some

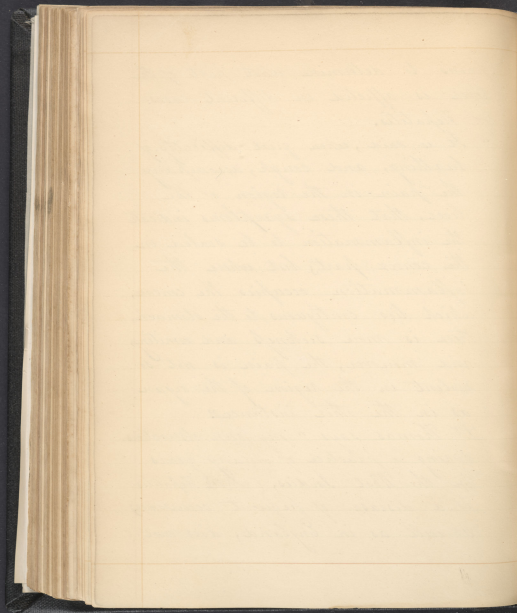




pains to determine what part of the liver is affected in different cases of Hepatitis.

"It is said, when great difficulty, of breathing, and cough, accompany the pain in the region of the liver, that these symptoms indicate the inflammation to be seated in the convex part; but where the inflammation occupies the concave, which lies contiguous to the stomach, there is more sickness and vomiting, and moreover, the pain is not so violent in the region of the organ as in the other instance."

Dr Thomas says "my own observations, during a practice of many years in the West Indies, (where Hepatitis is a disease of frequent occurrence) as well as in England, does not

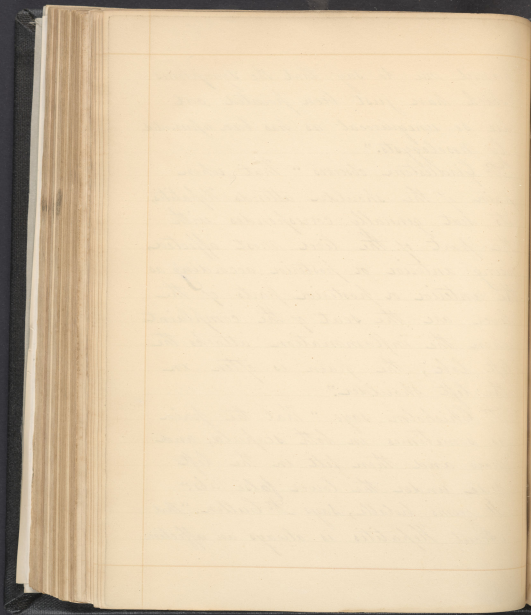


7  
permit me to say that the symptoms  
which have just been pointed out  
are so unequivocal as has been represented  
by nosologists."

Dr. Girdlestone observes "That when  
pain of the shoulder attends Hepatitis,  
its seat generally corresponds with  
the part of the liver most affected,  
being anterior or posterior according as  
the anterior or posterior parts of the  
liver are the seat of the complaint.  
when the inflammation attacks the  
left lobe, the pain is often in  
the left shoulder."

Dr. Chisholm says "That the pain  
is sometimes in both scapulae, and  
now and then felt in the left  
side under the lower false ribs."

It seems probable, says Dr. Cullen, "That  
Acute Hepatitis is always an affection

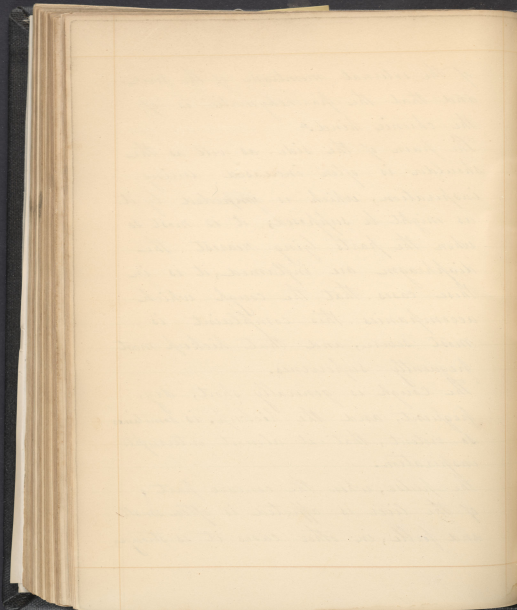


of the external membrane of the liver, and that the parenchymatic is of the chronic kind."

The pain of the side, as well as the shoulder is often increased during inspiration, which is ~~impeded~~ by it, as might be supposed; it is most so when the parts lying nearest the diaphragm are inflamed, it is in these cases that the cough which accompanies this complaint is most severe, and that hiccup most frequently supervenes.

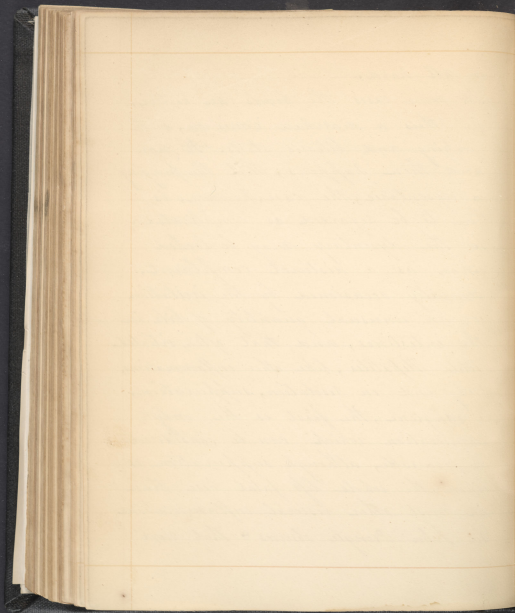
The cough is generally short, dry, frequent, and the hiccup, is sometimes so violent, that it almost interrupts inspiration.

The pulse, when the concave part of the liver is affected is often small and feeble; in other cases it is stronger,



in all hard.

In some cases the bowels are costive, in others a diarrhoea comes on, with griping and bilious stools. It now and then happens, that the purging is dysenteric, the case, however, is then to be regarded as complicated, for the dysentery may be looked upon as a distinct complaint, generally occasioned by the irritation of an unusual quantity of bile in the intestines, and that often irritated. Acute Hepatitis, like other inflammations, may end in resolution, suppuration, or gangrene, the first is the only termination which can be considered as favourable, although suppuration is upon the whole less fatal here than in most other visceral inflammations. Sir John Pringle observes "That next





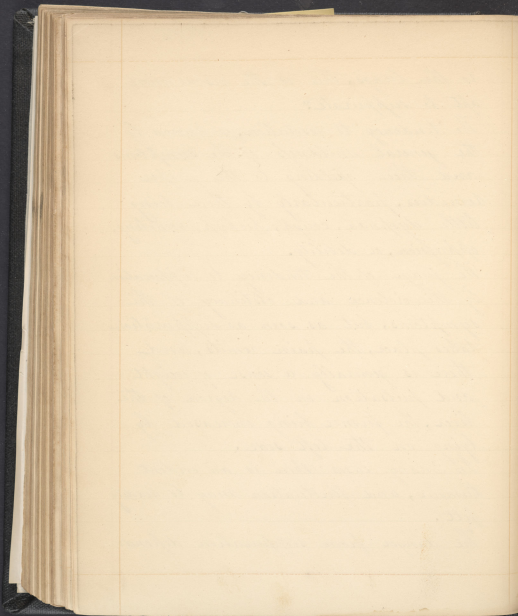
to the lungs, this is the viscus most apt to suppurate:

The tendency to resolution, is known by the general mildness of the symptoms and their yielding to the proper remedies, particularly by there being little dyspnaea, cough, hiccup, vomiting, oppression, or debility.

We judge of the tendency to suppuration by the violence and obstinacy of the symptoms, but as soon as suppuration takes place, the pain remits, and there is generally a sense of weight and pulsation in the region of the liver, the former being increased by lying on the left side.

In many cases there is an evident tumour, and fluctuation may be readily felt.

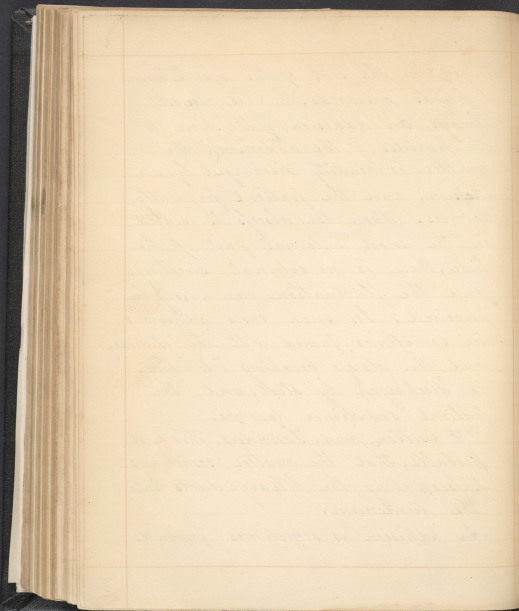
The danger from suppuration depends



11  
much on the seat of the abscess, when it points outwards, there is almost always an adhesion of the liver to the parietes of the abdomen, the matter is readily discharged by an incision, and the patient frequently recovers. When the abscess is seated in the most internal part of the liver, there is no external swelling, and the fluctuation can rarely be perceived. In such cases adhesions are sometimes formed with the intestines, and the abscess breaking into them is discharged by stool, and the patient sometimes recovers.

Drs Cullen, and Saunders, think it probable, that the matter sometimes passes along the biliary-ducts into the duodenum.

An adhesion is sometimes formed

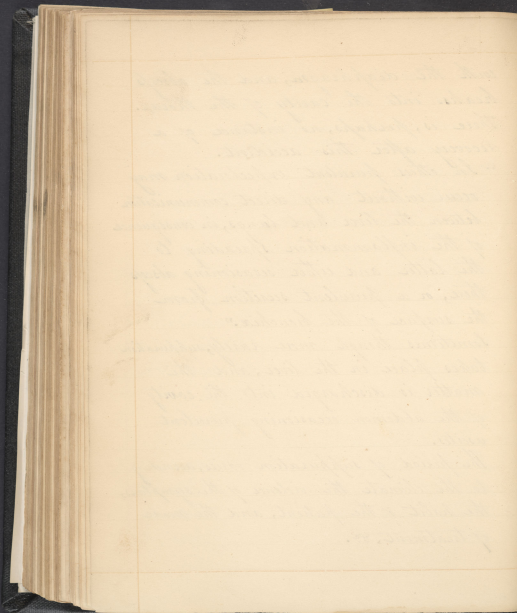


with the diaphragm, and the abscess breaks into the cavity of the thorax. There is, perhaps, no instance of a recovery after this accident.

"In others purulent expectoration may occur without any direct communication between the liver and lungs, in consequence of the inflammation spreading to the latter and either occasioning abscess there; or a purulent secretion from the surface of the bronchiae."

Sometimes though more rarely, suppuration takes place in the liver, and the matter is discharged into the cavity of the abdomen occasioning purulent ascites.

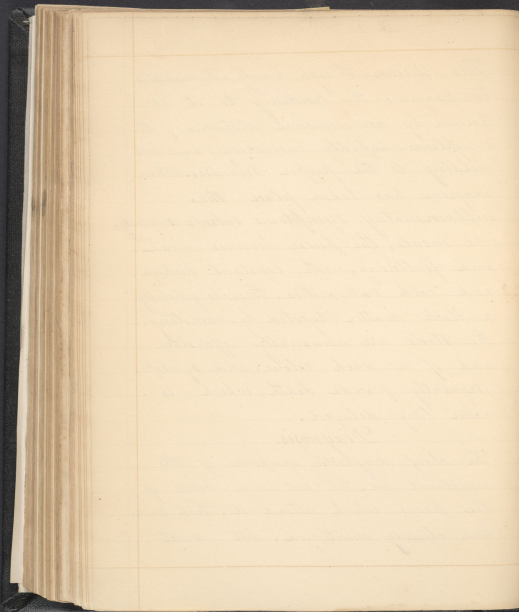
The period of suppuration varies, according to the climate the violence of the symptoms, the habit of the patient, and the mode of treatment, &c.



This disease, though rarely, terminates in gangrene: the tendency to it is known by an unusual violence of the symptoms, rapidly increasing, and not yielding to the proper remedies. When gangrene has taken place the inflammatory symptoms subside suddenly, cold sweats, the pulse becomes weak and fluttering, with constant hiccup and cold extremities. There is generally a black matter rejected by vomiting, the stools are unusually offensive and of a dark colour; and syncope frequently precede death, which is never long delayed.

#### Diagnosis.

The chief diagnostic symptoms of this complaint are, the seat and kind of the pains which attend it; that have been already mentioned, but most



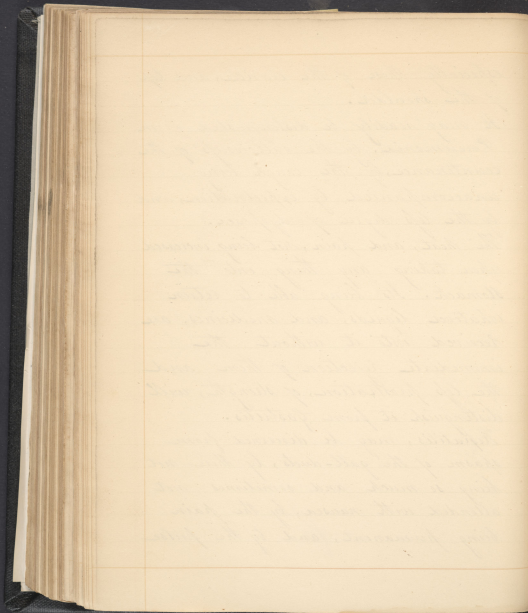


especially those of the clavicle, and top of the shoulder.

It may readily be distinguished from Pneumonia, by the sallowness of the countenance, by the cough being unaccompanied by expectoration, and by the less degree of dyspnoea.

The heat, and pain, not being increased upon taking any thing into the stomach. Its being able to retain whatever liquids, and medicines, are received into it without the immediate rejection of them and the less prostration, of strength, will distinguish it from Gastritis.

Hepatitis, may be discerned from spasm of the gall-ducts, by there not being so much and sometimes not attended with nausea, by the pain being permanent, and by the pulse

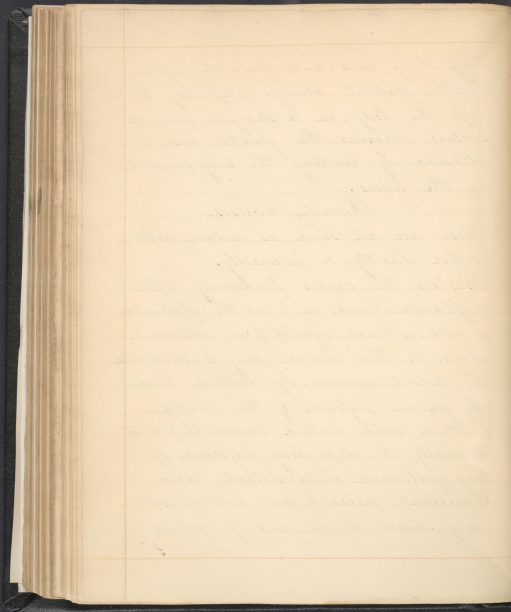


being strong, hard, and frequent, and by the patient always preferring to keep the body in a straight quiescent posture, whereas, the greatest ease is attained by bending the body forward on the knees.

### Remote Causes.

These are all such as induce debility, either directly, or indirectly.

Besides the causes producing other inflammations, such as the application of cold, external injuries from contusions, blows, &c. This disease may be occasioned by violent exercise, by intense heat, by certain passions of the mind. (It is said hatred causes it.) most especially the depressing passions, by long continued intermittent, and remittent fevers, by and intemperate use of ardent liquors, and by various



solid concretions in the substance of the liver, or any thing preventing the flow of the bile from the liver into the intestines.

Dr Cullen ranks among the occasional causes of the acute Hepatitis, the chronic form of this disease; for the two forms frequently pass into each other.

Other causes may predispose to this disease, but those I have mentioned are much the most common.

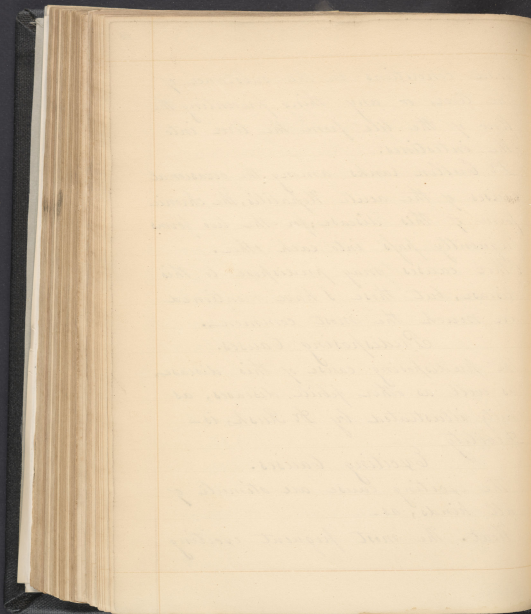
#### Predisposing Causes.

The predisposing cause of this disease, as well as other febrile diseases, as fully illustrated by Dr Rush, is—  
Debility.

#### Exciting Causes.

The exciting cause are stimuli of all kinds, as.

Heat. The most frequent exciting

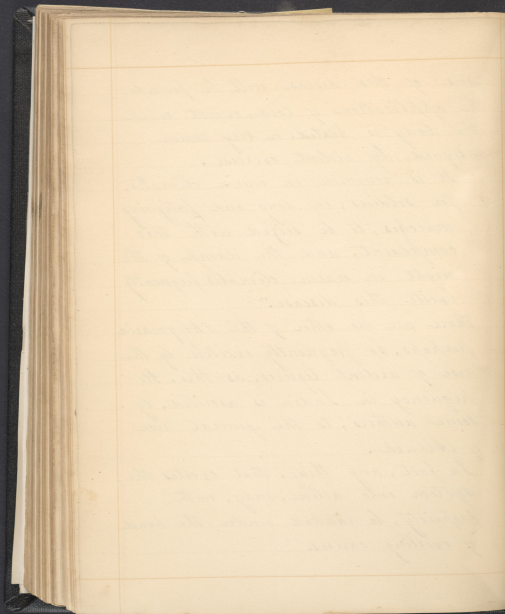


cause of this disease, will be found the application of cold, or wet, when the body is heated, or very much fatigued, by violent exercise.

"It is common in warm climates, for soldiers, in long and fatiguing marches, to be seized with this complaint, and the damp, of the night in warm climates frequently excite this disease."

There are no other of the Phlegmasia, perhaps, so frequently excited by the use of ardent liquors, as this. Its frequency in India is ascribed, by some authors, to the general use of Arrack.

In fact, any thing, that excites the system into action, may, with propriety, be ranked under the head of exciting causes.





### Proximate Cause.

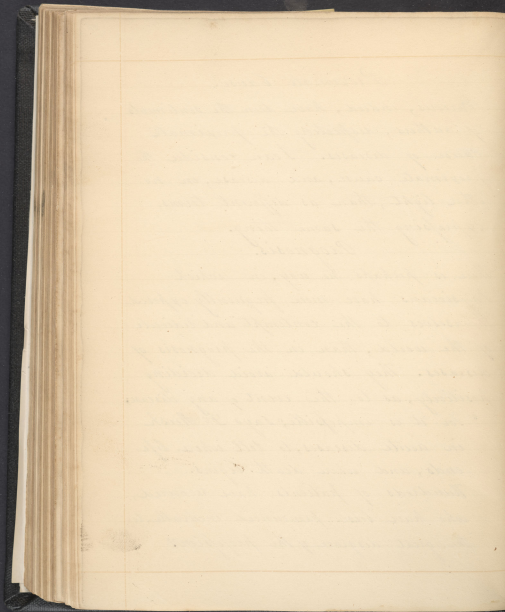
Various, indeed, have been the sentiments of authors, respecting the proximate cause of diseases. I can consider the proximate cause, and disease, in no other light, than as different terms, expressing the same thing.

### Prognosis.

There is perhaps no way, in which Physicians have more frequently exposed themselves to the contempt and ridicule of the world, than in the prognosis of diseases. They should avoid deciding positively, as to the event of any disease;

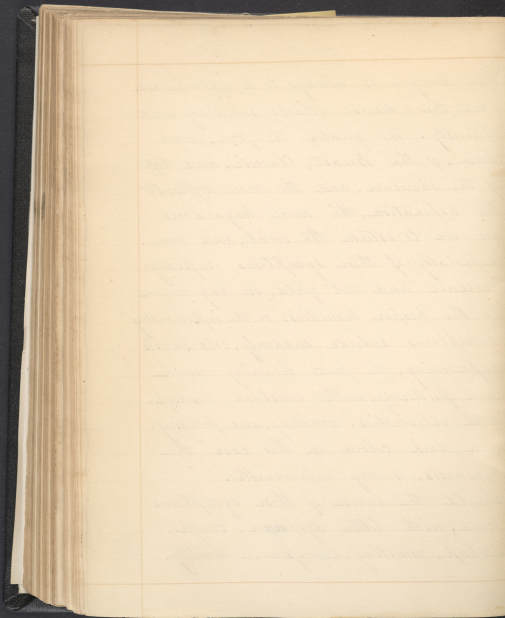
"For it is impossible," says Fe Rush in acute diseases, to tell where life ends, and where death begins.

Hundreds of patients have recovered, who have been pronounced incurable, to the great disgrace of the profession?



More danger is always to be apprehended, when this disease attacks suddenly and violently. The greater the fever, and pain, of the Breast, Clavicle, and top of the shoulder, and the more difficult the respiration, the more hazardous are we to esteem the event, and more especially if these symptoms rapidly increase and not yield, in any measure to the proper remedies: or the inflammatory symptoms subside suddenly, cold sweats supervening, the pulse becoming weak and fluttering, with constant hickup, cold extremities, vomiting, and purging, of a dark colour in this case the prognosis, is very unfavourable.

Should the reverse of those symptoms occur, with little dyspnoea, cough, hickup, vomiting, oppression, or debility,



and the other symptoms yielding, to remedies to be hereafter recommended; we may give encouragement on good grounds.

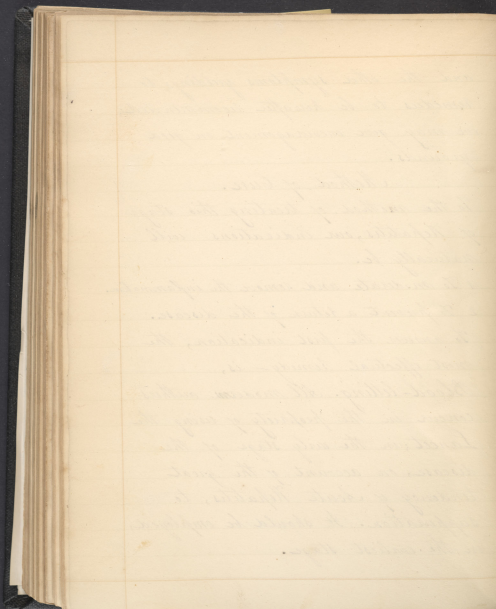
### Method of Cure.

To the method of treating this stage of Hepatitis, our indications will naturally be.

- 1 To moderate and remove the inflammation.
- 2 To prevent a return of the disease.

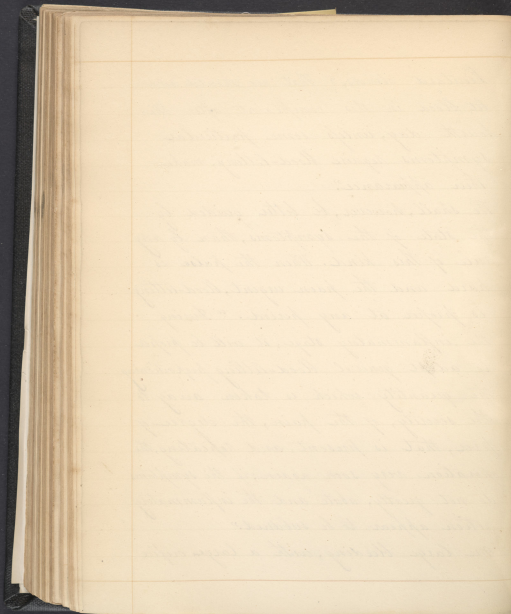
To answer the first indication, the most effectual remedy - is,

Blood-letting. All modern authors concur in the propriety of using the Lancet; in the early stage of the disease, on account of the great tendency of Acute Hepatitis, to suppuration. It should be employed, in the earliest stage.



Liviatard observes, "That we should seldom let blood in this complaint after the fourth day, unless some particular symptoms require blood-letting, make their appearance."

We shall, however, be better guided by the state of the symptoms, than by any rule of this kind. When the pulse is hard and the pain urgent, blood-letting is proper at any period. "During the inflammatory stage, it will be proper to adopt general blood-letting proportioning the quantity which is taken away to the severity, of the pain, the degree of fever, that is present, and repeating the operation very soon again; if the symptoms do not greatly abate and the inflammatory action appear to be subdued." One large bleeding, with a large orifice

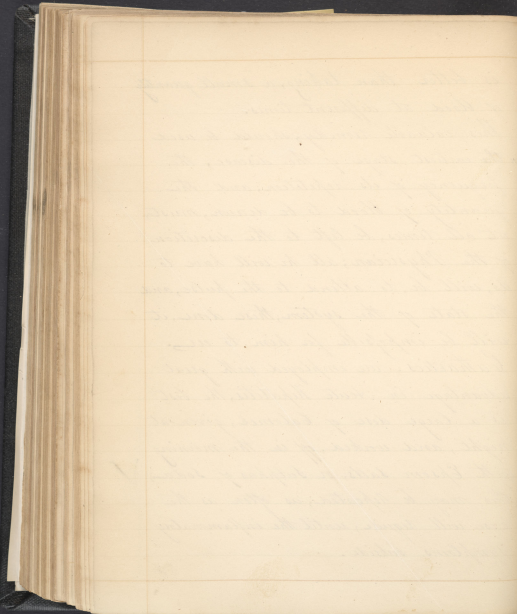




is better than taking, a small quantity of blood at different times.

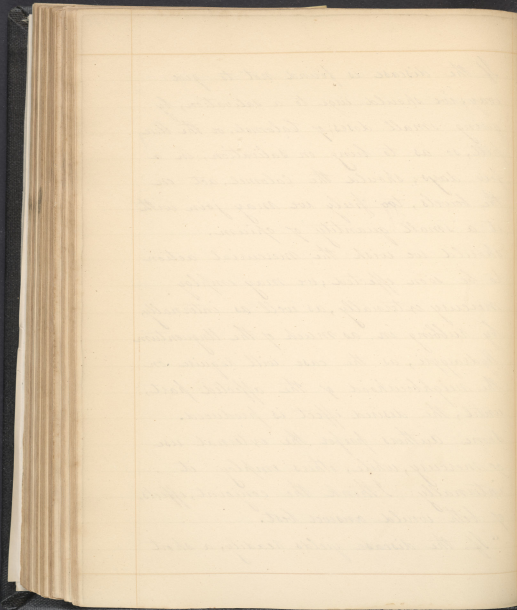
This valuable remedy, should be used in the earliest stage of the disease, the frequency of its repetition, and the quantity of blood to be drawn, must, at all times, be left to the discretion of the Physician; all he will have to do, will be to attend to the pulse, and the state of the system; these done, it will be impossible for him to err.

Cathartics. are employed with great advantage in Acute Hepatitis, the best is a large dose of Calomel, given at night, and worked off in the morning with Epsom Salts, or Sulphas of Soda; V this may be repeated, as often as the case will require, until the inflammatory symptoms subside.



If the disease is found not to give way; we should urge to a salivation, by giving small doses, of Calomel, or the Blue pill, so as to bring on salivation, in a few days; should the Calomel, act on the bowels, too freely we may join with it a small quantity of opium. should we wish the mercurial action to be soon effected; we may employ mercury externally, as well as internally, by rubbing in as much of the Unguentum Hydraggyi, as the case will require on the neighbourhood of the affected part, until, the desired effect is produced. Some authors prefer the external use of mercury, while, others employ it internally: I think the conjoint, effects, of both would answer best.

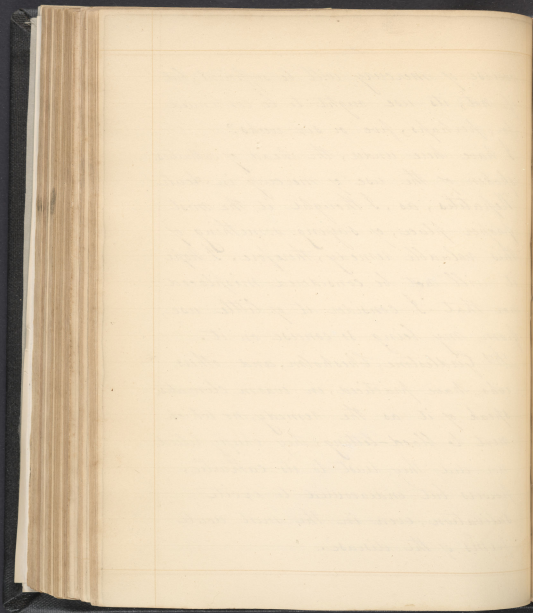
"If the disease yields readily, a short



course of mercury will be sufficient, but if not, its use ought to be continued for, perhaps, five or six weeks?

I have here under, the head of cathartics, spoken of the use of mercury in Acute Hepatitis, as, I thought it the most proper place, of saying something of this valuable remedy, therefore, I hope it will not be considered misplaced nor that I consider it of little use, from my being so concise on it.

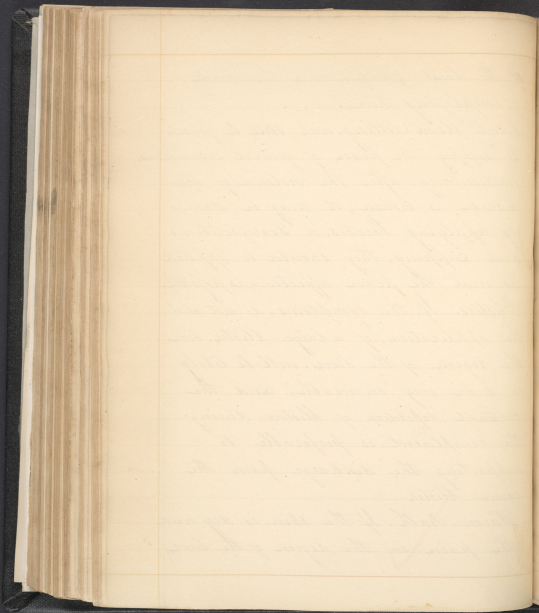
D<sup>rs</sup> Girdlestone, Chesholm, and others, who have practiced, in warm climates, speak of it as the remedy, no which next to blood-letting, they chiefly relied, nor did they trust to its cathartic, powers but endeavoured to excite salivation, even in the most acute forms of the disease.



of the local remedies, and the mode of employing them.

Local blood-letting, will still be found to supply the place, of general evacuations, particularly after the violence of the disease is broken; it may be done by applying Leeches, or Scarifications and Cupping, they should be applied as near the place affected, as possible. Blisters. If the symptoms, do not abate the application, of a large blister, over the region of the liver, will be likely to prove very serviceable, and the constant repetition of blisters, during the complaint, is preferable to supporting the discharge from the same blister.

Warm-Bath. If the skin, is dry, and the pain, in the region of the liver,

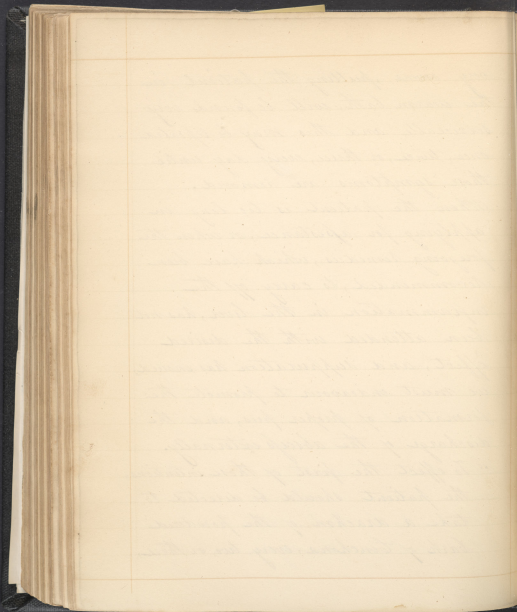




very severe, putting the patient in the warm bath, will be found very serviceable and this may be repeated once, twice, or thrice, every day until those symptoms are removed.

When the patient is too long in applying for assistance, or when the foregoing remedies, which have been recommended, to carry off the inflammation in the liver, has not been attended with the desired effect, and suppuration has ensued, we must endeavour to promote the formation of proper pus, and the discharge of the abscess externally.

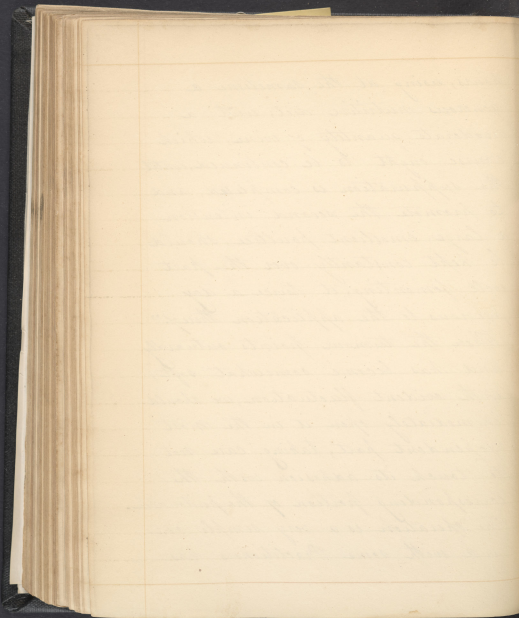
"To effect the first of those intentions, the patient should be directed to take a drachm. of the powdered bark of Cinchona, every two, or three,



hours, using at the same time a generous nutritive diet; with a moderate quantity of wine, which course ought to be continued, until the suppuration is completed, and to promote the second intention a large, emollient poultice, should be kept constantly over the part well fomenting, it twice a day previous to the application thereof."

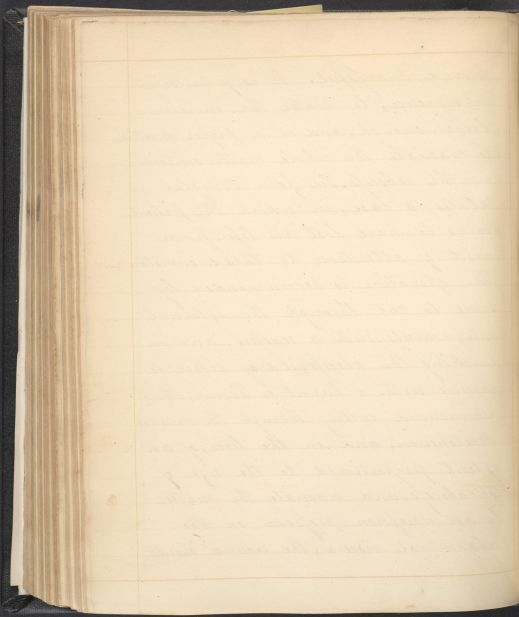
When the tumour points outwardly, and has become somewhat soft, with evident fluctuation, we should immediately open it in the most dependent part, taking care not to touch its adhesion with the corresponding portion of the peritonium.

The operation is a very simple one and with some Practitioners has



proved successful. It is of material consequence, to make the incision large, enough, and in a proper direction to evacuate the whole matter contained in the abscess. Sir John Pringle relates a case, in which the patient seems to have lost his life, from want of attention, to this circumstance.

The operation is recommended, by some, to cut through the external integuments, with a scalpel, and on reaching the abscess; it may either be opened with a Lancet, or Trocar, others recommend cutting through the muscles, Peritoneum, and in the liver, of an extent proportioned to the size of the abscess, and evacuate the matter by an uniform pressure on the abdominal viscera; the wound should



be kept open by light dressings, as,  
dry lint on removing which the  
matter may be pressed out as often  
as the case requires it.

To facilitate the discharge of the matter,  
the patient ought to be placed in  
the most favourable position,

To the end, of the cure, cicichona, with  
stomachic bitters, wine, and a generous  
diet, will be proper.

"Suppuration of the liver is a disease, of  
such frequent occurrence, in the East  
Indies, and other warm climates, that  
the Practitioners there have become very  
expert at this operation, and frequently,  
perform it with safety, when the tumour  
does not point at all, judging, merely by the  
preceding progress, of the case, and the  
degree of fulness, of the hypochondrium."

